

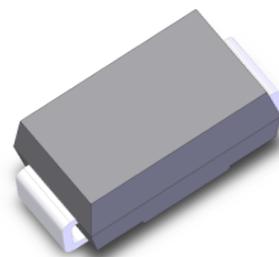


M1 thru M7

Surface Mount Glass Passivated Standard Rectifier
Reverse Voltage 50~1000V Forward Current 1A

Features

- Glass passivated Standard rectifiers
- Ideal for automated placement
- Low forward voltage drop
- High forward surge capability
- Moisture sensitivity: level 1, per J-STD-020



Typical Applications

DO-214AC(SMA)

- For use of general purpose rectification in lighting, cellular phone, portable device, power supplies and other consumer applications.

Mechanical Data

- Case:DO-214AC, molded epoxy body, Epoxy meets UL 94V-0 flammability rating
- Terminal:Matte tin plated leads, solderable per J-STD-002 and JESD22B-106
- Polarity:Indicated by cathode band

Maximum Ratings and Electrical Characteristics

(TA = 25 °C unless otherwise noted)

Parameter	Symbol	M1	M2	M3	M4	M5	M6	M7	Unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current TL (See Fig.1)	IF(AV)	1.0							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	30.0							A
Maximum forward voltage at IF=1.0Amps	VF	1.0							Volts
Maximum DC reverse current at rated DC blocking voltage	@Ta=25°C	5.0							uA
	@Ta=125°C	50.0							
Typical junction capacitance(Note1)	CJ	10.0							pF
Typical thermal resistance(Note2)	RθJA	62.0							°C/W
Typical thermal resistance(Note2)	RθJL	3.5							°C/W
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150							°C

Notes:1.Measured at 1.0MHz and applied reverse voltage of 4.0 D.C.

2.Thermal resistance from junction to lead, 0.197x0.197" (5.0x5.0mm) copper pads to each terminal



Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

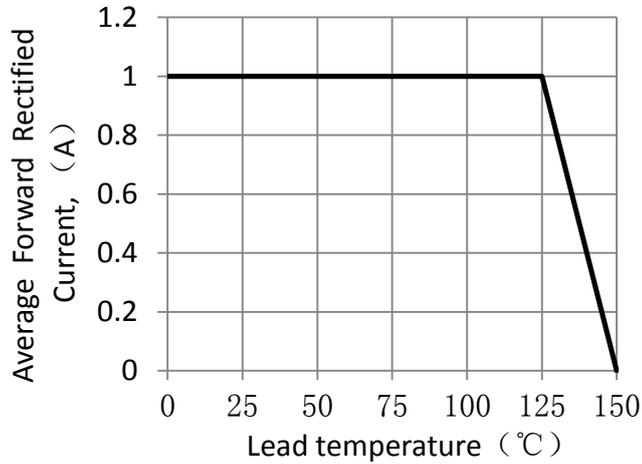


Figure 1. Forward Current Derating Curve

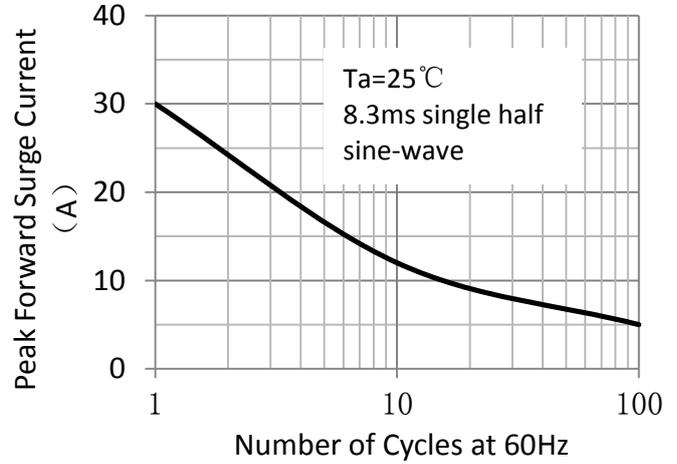


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

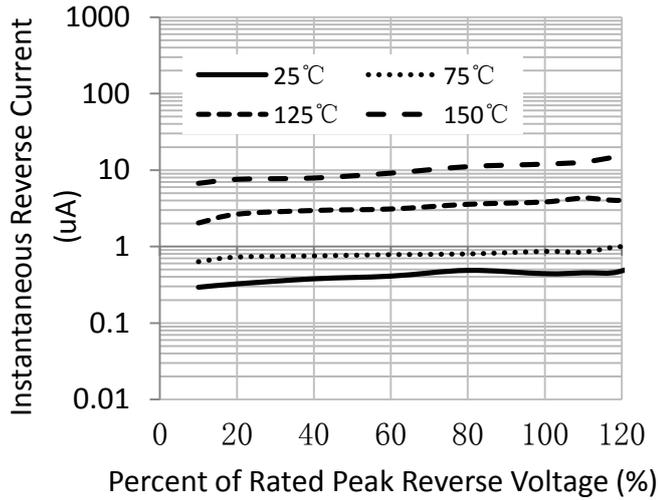


Figure 3. Typical Reverse Characteristics

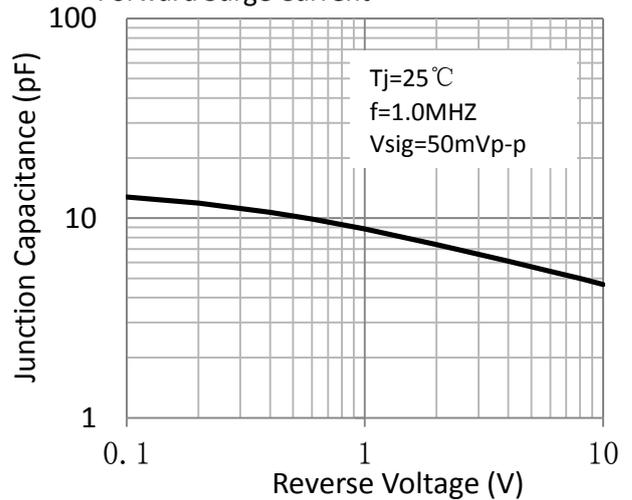


Figure 4. Typical Junction Capacitance

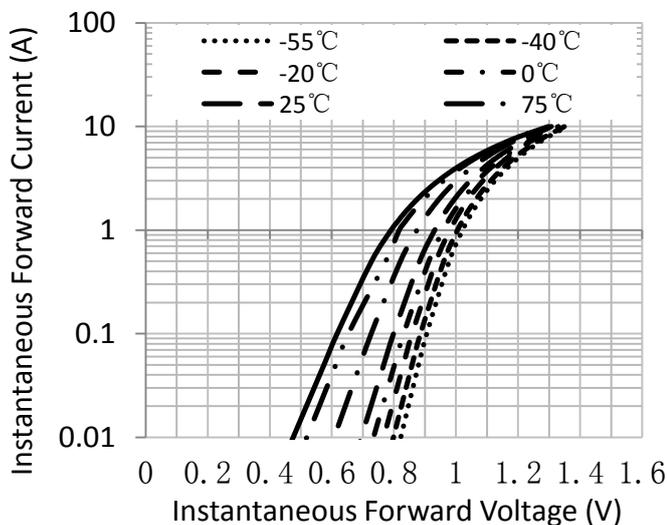
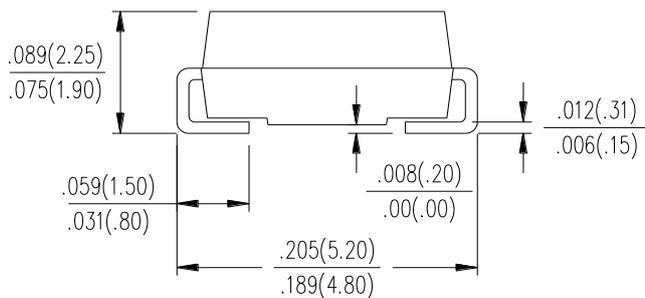
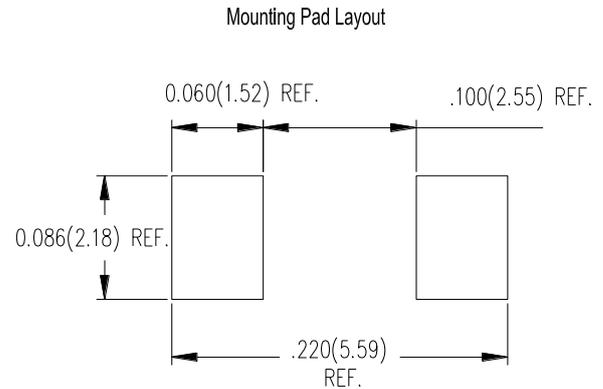
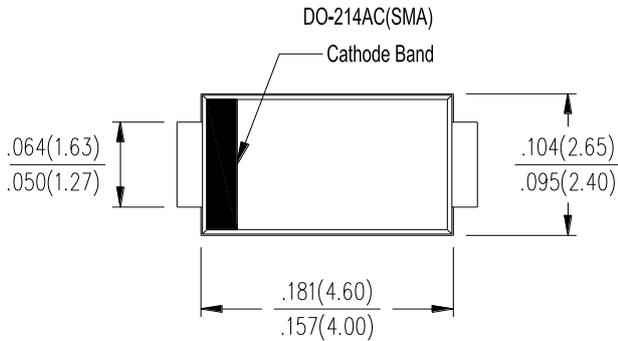


Figure 5. Typical Instantaneous Forward Characteristics

Package Outline Dimensions

in inches (millimeters)

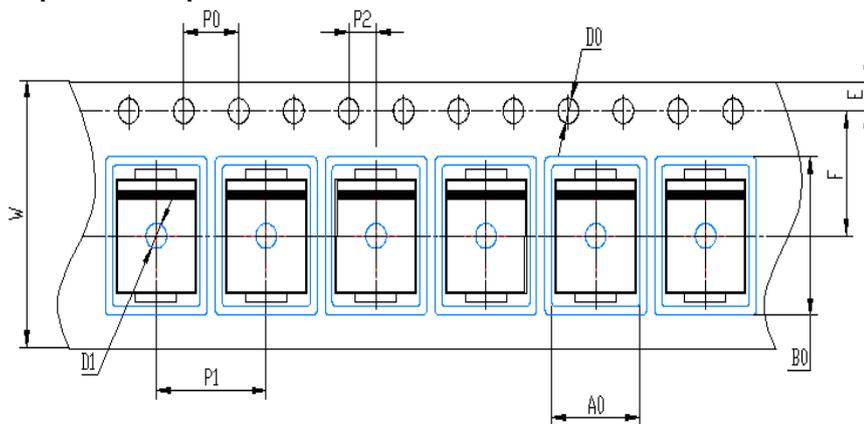


Packing Information

Packing quantities:

7500 pcs/Reel, 18 Reels/Box; 12mm Tape, 13" Reel

Tape & Reel Specification



Symbols	SMA(mm)
W	12 ± 0.2
E	1.75 ± 0.1
F	5.5 ± 0.05
D0	1.5 ± 0.1
D1	$1.50 +0.1/-0$
P0	4.0 ± 0.1
P1	4.0 ± 0.1
P2	2.0 ± 0.05
A0	2.65 ± 0.1
B0	5.25 ± 0.1



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